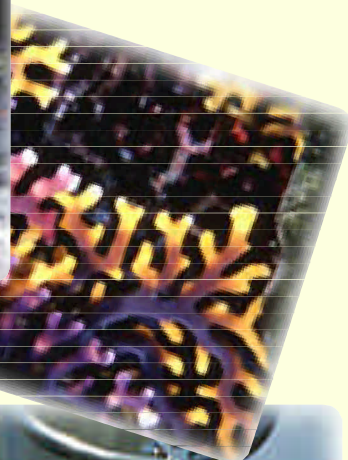




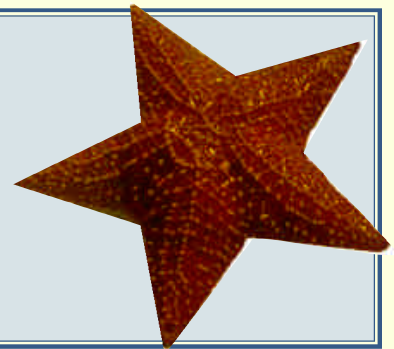


THE SEA GRANT LAW AND POLICY DIGEST is a bi-annual publication indexing the law review and other articles in the fields of ocean and coastal law and policy published within the previous six months. Its goal is to inform the Sea Grant community of recent research and facilitate access to those articles. The staff of the Digest can be reached at: the Sea Grant Law Center, Kinard Hall, Wing E - Room 256, P.O. Box 1848, University, MS 38677-1848, phone: (662) 915-7775, or via e-mail at sealaw@olemiss.edu .

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 I.**ADMIRALTY**

Wagener, Michael. "South African Admiralty and its English Origins — Will it Jump or must it be Pushed?" 36 *Journal of Maritime Law & Commerce* 61-75 (2005).

Wagener reviews South Africa's Admiralty Jurisdiction Regulation Act (AJRA), which mandates the use of an 1890 British law for the resolution of many maritime disputes. Discussions include *The Stella Tingas* ship collision case, the history of South Africa and the development of its legal system, and the problems created by the AJRA. Wagener argues for the partial repeal of the AJRA and offers insight as to how South Africa could replace the entire Act.

 II.**AQUACULTURE**

Alam, S.M. Nazmul, et. al. "Compliance of Bangladesh Shrimp Culture with FAO Code of Conduct for Responsible Fisheries: a Development Challenge." 48 *Ocean & Coastal Management* 177-188 (2005).

Alam, et. al. review a study of Bangladesh's coast to determine how many shrimpers were aware of the FAO Code of Conduct for Responsible Fisheries. Although Bangladesh had agreed to follow the Code, very few shrimp aquaculturists were familiar with it.

Giap, Dao Huy, et. al. "GIS for Land Evaluation for Shrimp Farming in Haiphong of Vietnam." 48 *Ocean & Coastal Management* 51-63 (2005).

Suitable shrimp farming sites were located during a study in Vietnam's Haiphong province. Giap, et. al. report that the study proved the usefulness of the land evaluation model. In addition to facilitating the discovery of shrimp farming locations, the model aided in the efficient allocation of land and helped improve conservation and sustainable land management.

 III.**CLIMATE CHANGE**

Hansen, James, et. al. "Earth's Energy Imbalance: Confirmation and Implications." 308 *Science* 1431-1435 (2005).

Hansen, et. al. propose a climate model which shows that the Earth is absorbing much more energy from the Sun than the planet emits into space. In the last ten years, increasing ocean temperatures have suggested a future increase in global temperatures of around 0.6°C without a reduction of greenhouse gases, leading to faster ice sheet thawing and sea level rise. The model also shows that the Earth responds slowly to climate change, which increases the importance of proactive, anticipatory measures to avoid any climate change.

Jacobs, Rebecca Elizabeth. "Treading Deep Waters: Substantive Law Issues in Tuvalu's Threat to Sue the United States in the International Court of Justice." 14 *Pacific Rim Law & Policy Journal* 103-128 (2005).

The tiny island nation of Tuvalu may file suit against the United States in the International Court of Justice, citing the nation's role in climate change and decision not to ratify the Kyoto Protocol. By 2054, the island of 11,000 will likely be overtaken by the Pacific Ocean, due to sea level rise. Jacobs discusses the difficulty of proving U.S. responsibility for the island's present and future damages.



Meehl, Gearld A., et. al. "How Much More Global Warming and Sea Level Rise?" 307 *Science* 1769-1772 (2005).

Meehl, et. al. compared two global climate models to predict the increase in global warming and sea level rise. The models show that global temperature increases from 1.1° to 3.5° Celsius will occur in the next century. As the temperature of the oceans rise, seawater will expand and cause a rise in sea level of nineteen to thirty centimeters by 2100. Even if pollution had been stabilized at the level it was in 2000, the Earth would still have warmed by 0.5° Celsius and the sea level would have risen by 320% in 2100.

Sissener, Elin H. and Trond Bjørndal. "Climate Change and the Migratory Pattern for Norwegian Spring-Spawning Herring—Implications for Management." 29 *Marine Policy* 299-309 (2005).

Sissener and Bjørndal demonstrate a connection between climatic changes and the size, year-class strength, and migratory pattern of the Norwegian spring-spawning herring (*Clupea harengus*). Overfishing and environmental causes are examined to determine why the herring moves from one fishery to another. Members of the herring fishery continue to argue about jurisdiction over the migratory fish.

Smith, L. C., et. al. "Disappearing Arctic Lakes." 308 *Science* 1429 (2005).

Satellite images taken over the past thirty years show signs of widespread size reductions among Siberia's 10,000 lakes. Smith, et. al. argue that this degradation is caused by the thawing of permafrost. Once the ground warms up, lake waters can be absorbed into the ground and disappear.

Wigley T. M. L. "The Climate Change Commitment." 307 *Science* 1766-1769 (2005).

Wigley explains the phenomenon of oceanic thermal inertia and its effects on the climate of the world. Oceanic thermal inertia shows that global temperature and sea levels will continue to rise for the next 400 years or longer if current greenhouse gas levels and the rate of glacial melt continue. Though glacial melt cannot be remedied, greenhouse gases could be reduced far below their present levels to lessen the destruction that island and coastal communities will face.



IV.

COASTAL AND OCEAN DEVELOPMENT

Peng, Jian, et. al. "Ecological Development of Coastal Areas in China." 33 *Coastal Management* 167-179 (2005).

China's development of shoaly land is discussed, including rundle development, the use of dike-ponds and brine pan, and shrimp pool tri-dimensional cultivation. The development approaches used on shoaly land differ among the various spatial scales. As such, development approaches on the regional, farm, and plot level are reviewed.

Roberts, Julian, et. al. "The Western European PSSA Proposal: A 'Politically Sensitive Sea Area.'" 29 *Marine Policy* 431-440 (2005).

Many European states asked for the creation of a large Particularly Sensitive Sea Area (PSSA) after the occurrence of several marine pollution events in nearby waters.



Roberts, et. al. examine the multinational PSSA application filed with the International Maritime Organization (IMO), as well as the responses filed by IMO member states.

Salvesen, David. "The Coastal Barrier Resources Act: Has It Discouraged Coastal Development?" 33 *Coastal Management* 181-195 (2005).

Growth continues on coastal barrier islands in the U.S., despite Congress' attempts to create a market-based public policy to slow such development. The Coastal Barrier Resources Act is critiqued. Salvesen explains why the Act and the withdrawal of federal disaster recovery funds have not hindered development on some barrier islands.



V.

COASTAL ZONE MANAGEMENT

Barragán, Juan M., et. al. "Towards Integrated Coastal Zone Management in Chile." 33 *Coastal Management* 1-24 (2005).

Barragán, et. al. review the rapid growth of the Chilean coast and lack of governmental management of the resources. In 1994, the Chilean government passed The National Policy for the Use of the Coastal Fringe, detailing the progress made in resource management as well as the lack of resources necessary to take full advantage of the legislation. Improvements are suggested, such as amending the National Policy for the Use of the Coastal Fringe and increasing public knowledge and participation.

de Vivero, J. L. Suárez and J. C. Rodríguez Mateos. "Coastal Crisis: The Failure of Coastal Management in the Spanish Mediterranean Region." 33 *Coastal Management* 197-214 (2005).

de Vivero and Mateos discuss how Spain's coastal management programs have been unable to reduce the destruction of that nation's coastal zones. Neither the use of the former state-centralized model, nor the latest organizational model, has shown any signs of success. Unforeseen coastal economic growth and confusing sectoral policies have contributed to problems in the coastal zone.

Jentoft, Svein, and Arild Buanes. "Challenges and Myths in Norwegian Coastal Zone Management." 33 *Coastal Management* 151-165 (2005).

Jentoft and Buanes look into the Norwegian approach to coastal management, finding that Norway tends to postpone or neglect difficult coastal management decisions. Rather than setting defined goals, Norway should focus on the risk management of the coastal zone.

Kellogg, Wendy A., et. al. "Training Needs of Coastal Resources Decision Makers in Ohio's Lake Erie Basin." 33 *Coastal Management* 335-351 (2005).

Kellogg, et. al. review a study of the informational needs of Lake Erie basin resource managers. State and federal agencies should offer a training program for decision makers. Agencies should also develop an information clearinghouse, computer-assisted training, and regional learning systems to increase the training received by decision makers.



Lau, Maren. "Integrated Coastal Zone Management in the People's Republic of China-An Assessment of Structural Impacts on Decision-making Processes." 48 *Ocean & Coastal Management* 115-159 (2005).

The political system in China hinders sustainable development in its coastal zones. Lau argues that for an Integrated Coastal Zone Management (ICZM) system to be instituted, China must change its decision-making structure.

Ortiz-Lozano, L., et. al. "Environmental Evaluation and Development Problems of the Mexican Coastal Zone." 48 *Ocean & Coastal Management* 161-176 (2005).

Since Mexico's coastal zone receives most of that nation's foreign investment, the Mexican federal government studied the public's level of knowledge regarding coastal water quality and the area's environmental condition. Ortiz-Lozano, et. al. explain the results of the study and give an environmental analysis of Mexico's coastal zone. The authors found that tourism and the oil and chemical industries contribute the most to coastal pollution.

Peterlin, Monika, et. al. "Public Perception of Environmental Pressures within the Slovene Coastal Zone." 48 *Ocean & Coastal Management* 189-204 (2005).

Peterlin, et. al. conducted a study to determine the public's perception of the environmental pressures on the Slovene coast. The study showed employees at the local port viewed the port's effect on the environment as being much less than the view of the public. Both groups viewed non-port environmental impacts sources in a similar manner, and both underestimated the environmental impact of road traffic on air quality.

Suárez de Vivero, J. L., and J. C. Rodríguez Mateos. "Coastal Crisis: The Failure of Coastal Management in the Spanish Mediterranean Region." 33 *Coastal Management* 197-214 (2005).

Suárez de Vivero and Mateos discuss the continuing decline of Spain's Mediterranean coastline. The failure stems from the lack of combined efforts to manage the resources from the multiple coastal regions. The lack of administrative tools, combined with the increase in new economic activity and political bickering, has led to a lack of coastal management with no foreseeable cure.

Wang, Cheng-Ping and Chad P. Dawson. "Recreation Conflict along New York's Great Lakes Coast." 33 *Coastal Management* 297-314 (2005).

Wang and Dawson review their study of recreation conflict between stakeholders and visitors to the New York Great Lake coastline. The use of goal interference theory enabled the correct predictions of conflict occurrence among motorboat enthusiasts, personal watercraft, and riparian landowners.



VI. CORAL REEFS

Pandolfi, J.M., et al. "Are U.S. Coral Reefs on the Slippery Slope to Slime?" 307 *Science* 1725-1726 (2005).

Pandolfi, et. al. discuss ways to stop the degradation of coral reefs in the United States, as well as ways to rebuild them. Coral reefs should be managed using an ecosystem-wide



approach, rather than trying to protect smaller coral communities. Investment in, and major changes to, U.S. coral reef management could result in the recovery of lobster, conch, and aquarium fish, as well as increases in water quality, tourism, and the sustainable harvesting of megafauna.

Simpson, Stephen D., et. al. "Homeward Sound." 308 *Science* 221 (2005).

A study conducted off Australia's coast shows that some young fish are attracted to coral reefs bustling with sound. Submersible speakers were implanted in dead coral so that the sounds of an active reef (snapping shrimp and fish calls) could be piped below the water's surface. Dominant families of reef fish were attracted to the sound-emitting coral rubble much more than to the silent coral patches.

Thompson, William G., and Steven L. Goldstein. "Open-System Coral Ages Reveal Persistent Suborbital Sea-Level Cycles." 308 *Science* 401-404 (2005).

Sea level is a good measure of global climate, and has been connected to the Earth's orbital variations. The mystery of suborbital-frequency sea-level change has not been solved, mainly due to issues with uranium/thorium coral dating. Thompson and Goldstein suggest a new method to correct coral dating problems and thereby advance sea-level reconstruction.



VII.

DAMS

Dornsife, Alison M. "From a Nonpollutant into a Pollutant: Revising EPA's Interpretation of the Phrase 'Discharge of Any Pollutant' in the Context of NPDES Permits." 35 *Environmental Law* 175-208 (2005).

Dornsife reviews the environmental effects of polluted water releases from dams. Two types of Clean Water Act pollution permits are discussed (section 402 National Pollutant Discharge Elimination System (NPDES) permits and section 404 dredge and fill permits), as is the EPA's definition of "discharge." The author argues that EPA's failure to require an NPDES permit for the discharge of dam water does not entitle the agency to deference, since the EPA has never formalized its interpretation of "discharge" for NPDES purposes.

Nilsson, Christer, et. al. "Fragmentation and Flow Regulation of the World's Large River Systems." 308 *Science* 405-408 (2005).

More than half of the world's large rivers have been impacted by dams. Dam-restricted waters harbor high irrigation pressures and handle twenty-five times as many economic activities per unit of water as unaffected rivers. Nilsson, et. al. offer their report as a tool to plan for climate change and increased water use.



VIII.

ECONOMICS

de Langen, Peter W. "Trends and Opportunities for the Long-Term Development of Rotterdam's Port Complex." 33 *Coastal Management* 215-224 (2005).

de Langen reviews the long-term development of Rotterdam's port. After reviewing harbor expansion literature and speaking with several professors, de Langen cites a number



of trends that will be important for the port's development. These include the rise in manufacturing and logistics platforms, mixed land use, and 'regional innovation systems.'

Duda, Alfred M. "Targeting Development Assistance to Meet WSSD Goals for Large Marine Ecosystems and Small Island Developing States." 48 *Ocean & Coastal Management* 1-14 (2005).

Duda reviews the development assistance offered by the Global Environment Facility for coastal and island nations. Duda argues that such assistance is essential in order to prevent environmental damage to coastal and large marine ecosystems.

Kwak, Seung-Jun, et. al. "The Role of the Maritime Industry in the Korean National Economy: an Input-Output Analysis." 29 *Marine Policy* 371-383 (2005).

Kwak, et. al. discuss a study they conducted on the role played by the maritime industry in Korea's national economy. The goal of the study was to provide policy makers with valuable information on maritime industries, including production, employment, and the effects of price change.

Lew, Daniel K., and Douglas M. Larson. "Valuing Recreation and Amenities at San Diego County Beaches." 33 *Coastal Management* 71-86 (2005).

Lew and Larson explore the economic values associated with San Diego County Beaches. These values are determined using a demand model that explains a beach user's choice of which beach to visit, and include the impact of beach closures, amenities, and a day at the beach. These economic values are important for policymakers and analysts in determining the best policies for beach recreation.

Llacer, Francisco J. Montero. "The Panama Canal: Operations and Traffic." 29 *Marine Policy* 223-234 (2005).

Llacer discusses the operation of the Panama Canal and its modernization, focusing on the adequacy of projected plans and future requirements for maintaining its capacity. The analysis also focuses on the traffic systems and the human resources associated with the Panama Canal.

Llacer, Francisco J. Montero. "Panama Canal Management." 29 *Marine Policy* 25-37 (2005).

Llacer focuses on the historical and current management of the Panama Canal, its legal basis, and toll system to determine its future capacity. The current management is demonstrating high performance levels and is preparing for future travel through the Canal.

Stoneham, Gary, et. al. "Reforming Resource Rent Policy: an Information Economics Perspective." 29 *Marine Policy* 331-338 (2005).

Stoneham, et. al. promote the importance of information economics in management of fisheries. Auctions can be useful in choosing new aquaculture locations, as well as helping to publicize the cost information held by fishing companies. According to the authors, this information is crucial to the efficient allocation of fishery access.



Tsai, Ming-Chih and Chin-Hui Su. "Political Risk Assessment of Five East Asian Ports—the Viewpoints of Global Carriers." 29 *Marine Policy* 291-298 (2005).

Tsai and Su offer a comparison of the political and environmental risks facing the East Asian ports of Hong Kong, Singapore, Busan, Kaohsiung and Shanghai. The comparison reveals that political risk is closely related to each port's business environment.

Wu, Bin and Nik Winchester. "Crew Study of Seafarers: A Methodological Approach to the Global Labour Market for Seafarers." 29 *Marine Policy* 323-330 (2005).

Wu and Winchester describe the crew study of seafarers (CSS), which examined the global breakdown of seafarer locations, crewing patterns and the intricacies of seafarers moving between native and foreign ships, among other things.



IX.

ECOSYSTEM MANAGEMENT

Cho, Dong Oh. "Lessons Learned from Lake Shiwha Project." 33 *Coastal Management* 315-334 (2005).

Cho discusses the Lake Shiwha Project in Korea. The project involved the construction of a dike in the entrance to an estuary. Though the project was designed to hold freshwater in a nearby lake and drain ten square kilometers of wetlands for agricultural and industrial improvements, the Korean government gave up on the idea when the dike was completed, citing uncontrollable pollution in the lake.



X.

ENDANGERED SPECIES

Laist, David W. and John E. Reynolds. "Florida Manatees, Warm-Water Refuges, and an Uncertain Future." 33 *Coastal Management* 279-295 (2005).

Laist describes the various habitats of the endangered Florida manatee, including warm-water refuges in the southern part of the state, outfalls from power plants, and natural warm-water springs. Many of the manatee's refuges may disappear in the near future, as many power plants favored by the species will be eligible for closure and the heightened human extraction of groundwater could eradicate natural springs in the state. Laist reviews the impacts that such habitat loss would have on the manatee and offers possible management solutions.



XI.

FISHERIES MANAGEMENT

Baskaran, R. and J.L. Anderson. "Atlantic Sea Scallop Management: an Alternative Rights-based Cooperative Approach to Resource Sustainability." 29 *Marine Policy* 357-369 (2005).

U.S. sea scallop fishery regulations have successfully rebuilt scallop stocks in the Atlantic Ocean, but fishers now face high harvesting costs. Baskaran and Anderson discuss the necessity of property rights in the sea scallop fishery. The development of Territorial User Rights in Fishing (TURFs) and harvesters' cooperatives could strengthen the fishery as well as improving its efficiency.



Bennett, Elizabeth. "Gender, Fisheries and Development." 29 *Marine Policy* 451-459 (2005).

Bennett addresses the role that gender plays in West African fisheries management. Understanding gender complexity is vital to achieving sustainable fishing industries in the region. Policy interventions could improve institutional capacity in coastal villages, and the increased collection of gender and fisheries data would create a fishery enhancement knowledge base for these remote fishing communities.

Bess, Randall. "Expanding New Zealand's Quota Management System." 29 *Marine Policy* 339-347 (2005).

Bess details the challenges, legislative changes, and procedural changes that are associated with introducing species into the quota management system (QMS) for New Zealand. Also discussed is the application of the individual transferable quota (ITQ) for management of fisheries resources, the Fisheries Amendment Act 1986, the Fisheries Act 1996, and projects by the Ministry of Fisheries to introduce species into the QMS.

Brandt, Sylvia. "The Equity Debate: Distributional Impacts of Individual Transferable Quotas." 48 *Ocean & Coastal Management* 15-30 (2005).

Brandt investigates a marine policy switch made in the mid-Atlantic clam fishery. The fishery moved away from a command-and-control management policy to an individual transferable quota system. The regulatory change was equally challenging to all segments of the clam industry.

Catchpole, T.L., et. al. "Discards in North Sea Fisheries: Causes, Consequences and Solutions." 29 *Marine Policy* 421-430 (2005).

Catchpole, et. al. discuss the North Sea fisheries' discard of unwanted fish. The authors argue that the use of simple trawls and lax enforcement of the quota system has increased the amount of discard and that fishing opportunity incentives should be developed to reduce discard and encourage the use of selective fishing methods.

Corkett, Christopher J. "The Pew Report on US Fishery Councils: A Critique from the Open Society." 29 *Marine Policy* 247-253 (2005).

A study of the regional fishery management councils responsible for managing U.S. coastal fish stocks was supported by the Pew Charitable Trusts. The report addressed how to avoid decision-making that is based on irrational arguments, as well as how to ensure that maximum sustainable yields and optimum yields are not thought of as impartial scientific predictions.

Daw, Tim and Tim Gray. "Fisheries Science and Sustainability in International Policy: A Study of Failure in the European Union's Common Fisheries Policy." 29 *Marine Policy* 189-197 (2005).

Daw and Gray discuss the failure of the European Union to attain sustainable fisheries management and its failure to adequately incorporate scientific fisheries research into policy. Based on fisheries science within the Common Fisheries Policy, Daw and Gray



explain that factors pertaining to scientific data supply and use within the political system and fisheries science hinder successful fisheries management.

Fina, Mark. "Rationalization of the Bering Sea and Aleutian Islands Crab Fisheries." 29 *Marine Policy* 311-322 (2005).

Fina discusses the problem of overcapacity in the Bering Sea and Aleutian Islands crab fisheries. The North Pacific Fishery Management Council has introduced a new management scheme to reduce the fishing "race" for crabs while balancing the concerns of stakeholders. Obstacles to the new management scheme are reviewed.

Frid, Chris, et. al. "Ecosystem-based Fisheries Management: Progress in the NE Atlantic." 29 *Marine Policy* 461-469 (2005).

Northeast Atlantic fisheries managers are being cautious when setting catch limits, and have recently asked the scientific community to help them develop a fisheries management plan utilizing an ecosystem-based approach using an ecosystem-based viewpoint. Fisheries in the North Sea are highlighted as an example of the needed changes in fishery management.

Grafton, R. Quentin, and Tom Kompas. "Uncertainty and the Active Adaptive Management of Marine Reserves." 29 *Marine Policy* 471-479 (2005).

Grafton and Kompas offer a six-step process for creating and directing fishery reserves using contemporary marine reserve modeling. Fishery reserves minimize environmental changes, increase fish populations, and stabilize the size of harvests.

Hønneland, Geir. "Fisheries Management in Post-Soviet Russia: Legislation, Principles, and Structure." 36 *Ocean Development & International Law* 179-194 (2005).

This article reviews the legislation, principles, and structure of Russian fisheries management since the break-up of the Soviet Union. The creation and implementation of Russian fisheries legislation has been slow and fumbling, and the structure of fisheries management in flux. One reason for this is the ideological gap between the federal bodies involved in the regulation of the fisheries (*abstract courtesy of Ocean Development & International Law*).

Kleiss, Melanie E. "The Salmon Hatchery Myth: When Bad Policy Happens to Good Science." 6 *Minnesota Journal of Law, Science & Technology* 333-441 (2004).

Salmon hatcheries are now being used as a way to manage salmon fisheries. Kleiss argues that the use of hatcheries is problematic because hatcheries do not address the real issues that cause the decline of salmon populations.

Liu, Wen Hong, et. al. "Sustainable Coastal Fishery Development Indicator System: A Case of Gungliau, Taiwan." 29 *Marine Policy* 199-210 (2005).

The sustainable fishery development indicator system (SFDIS) shows fishery changes at various times and locations and allows for modifications to management policies and structures. Modifications may allow for sustainable development of the fisheries. In Gungliau, Taiwan, the development of the SFDIS was tested and Factor Analysis was applied to the indicator aggregation. The SFDIS gives the time deviation of each indicator and the sustainable trend at each developmental phase.



Macpherson, Marian. “...To the Gulf Stream Waters: Stewardship for Essential Fish Habitat.” 18 *Tulane Environmental Law Journal* 97-140 (2004).

Macpherson explores the United States’ ability to provide stewardship for the marine environment by looking at the Essential Fish Habitat (EFH) provisions of the U.S.our federal fisheries management regime and the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

Makino, Mitsutaku, and Hiroyuki Matsuda. “Co-management in Japanese Coastal Fisheries: Institutional Features and Transaction Costs.” 29 *Marine Policy* 441-450 (2005).

Makino and Matsuda review the history and structure of Japanese coastal fishery management. Resource conservation is very important in the Japanese system, and is achieved through multilevel coordination and government assistance. Fishery transaction costs are discussed, including monitoring, enforcement and compliance.

Orebech, Peter. “What Restoration Schemes Can Do? Or, Getting It Right Without Fisheries Transferable Quotas.” 36 *Ocean Development & International Law* 159-178 (2005).

Under the Individual Transferable Quota (ITQ) schemes, the economic calculations fail to reflect a just distribution of wealth and results in deprivation of the public trust of fisheries...Norwegian cost-benefit studies indicate a financial loss for second-generation ITQ owners due to the high price of tradable quotas. The financial burden caused by ITQs creates overfishing and pressure on the fishing stocks, which puts coastal municipalities at risk (*abstract courtesy of Ocean Development & International Law*).

Schrank, William E. “The Newfoundland Fishery: Ten Years after the Moratorium.” 29 *Marine Policy* 407-420 (2005).

The 1992 commercial closure of the northern cod stock was caused by overfishing and harsh environmental conditions. The stock has never recovered. Schrank reviews the current crises in the Newfoundland economy and fishery, including rampant unemployment, population decline, low fishing profits, and high fishery subsidies.

Standal, Dag. “Nuts and Bolts in Fisheries Management - a Technological Approach to Sustainable Fisheries?” 29 *Marine Policy* 255-263 (2005).

The Food and Agriculture Organization of the United Nations has stated that overcapacity in the fishing fleet is a challenge for most fisheries. Overcapacity can increase pressure on fish populations and decreases fishing fleet profits. This raises fishery control and management costs. Even if restrictions are implemented, the technological advances allow fleets to expand capacity even when the number of vessels fishing is reduced.

Thorpe, Andy, et. al. “When Fisheries Influence National Policy-making: An Analysis of the National Development Strategies of Major Fish-producing Nations in the Developing World.” 29 *Marine Policy* 211-222 (2005).

The role of a country’s fishery sector in its national development plan is discussed. Fisheries playing an integral role in a nation’s trade and food security are more likely to



be included in the country's developmental plans. The authors evaluated the contents of the developmental plans. Only two of the five countries examined have mainstream fisheries in a major way.

Watson, Reg, et. al. "Catching Some Needed Attention." 29 *Marine Policy* 281-284 (2005).

Watson, et. al., introduce a website which allows policy makers and fisheries managers to track what species have been caught within their jurisdiction and which countries caught them. This tracking information is widely available to interested parties through the internet.



XII.

INTERNATIONAL AGREEMENTS

Cho, Sungioon. "A Dual Catastrophe of Protectionism." 25 *Northwestern Journal of International Law and Business* 315-347 (2005).

Cho examines the Vietnam-U.S. Bilateral Trade Agreement that encourages free trade and U.S. investment in Vietnam, with an emphasis on how the U.S. has dealt with Vietnam's aquaculture industry and farmed catfish exports. Cho states that while the U.S. encourages free trade, it has erected trade barriers through "labeling laws" and subsidies. Cho argues that this form of protectionism is self-defeating and that the U.S. should take a real leadership role in the area of free trade.

Cook, Beverly. "Lobster Boat Diplomacy: the Canada-US Grey Zone." 29 *Marine Policy* 385-390 (2005).

Cook discusses the continuing jurisdictional conflict between Canada and the U.S. over the 1984 Gulf of Maine boundary decision. The "grey zone" is a lobster fishing zone which was the scene of a 2002 fight between fishermen from both countries. Issues such as stock conservation and socioeconomic impacts need to be addressed.

Hayashi, Moritaka. "Military Intelligence Gathering Activities in the EEZ: Definition of Key Terms." 29 *Marine Policy* 123-137 (2005).

Moritaka discusses the ambiguity associated with several terms in the 1982 United Nations Convention on the Law of the Sea (UNCLOS) and reviews the origins and the terms' different readings. Moritaka points out the areas of disagreement and tries to shed light on their intended meaning.

Knauss, John M. "The Sino-Vietnamese Agreement on Maritime Boundary Delimitation in the Gulf of Tonkin." 36 *Ocean Development & International Law* 13-24 (2005).

This article addresses the recently ratified Sino-Vietnamese Boundary Delimitation Agreement in the Gulf of Tonkin and its implications for bilateral cooperation and development of friendly relations between China and Vietnam. As the first maritime boundary line for China, the delimitation in the Gulf of Tonkin is indicative of China's positive attitude towards the resolution of other maritime issues with Vietnam and other neighboring countries (*abstract courtesy of Ocean Development & International Law*).



Petteway, Kara L. "Free Trade vs. Protectionism: The Case of Catfish in Context." 20 *North Carolina Journal of International Law and Commercial Regulation* 473-514 (2004).

Petteway discusses how U.S. catfish and shrimp farmers are causing major problems for the Vietnam-U.S. Bilateral Trade Agreement, signed in 2001. Petteway concludes that the problems arise out of the conflict between U.S. foreign policy and the foreign competition problems facing domestic producers.

Price, Tracey M. "Negotiating WTO Fisheries Subsidy Disciplines: Can Subsidy Transparency and Classification Provide the Means Towards an End to the Race for Fish?" 13 *Tulane Journal of International and Comparative Law* 141-175 (2005).

Price suggests steps that must be taken before an international fisheries subsidies agreement can be formed. One step would be to increase the transparency of these subsidies. Price also discusses the Agreement on Subsidies and Countervailing Measures (SCM Agreement), the Agreement Establishing the World Trade Organization (Final Act), and the Committee on Subsidies and Countervailing Measures and Subsidiary Bodies.

Sharma, O.P. "An Indian Perspective." 29 *Marine Policy* 147-151 (2005).

Sharma argues that the "peaceful purposes" clause in the 1982 United Nations Convention on the Law of the Sea (UNCLOS) is merely a policy goal, because UNCLOS does not put restrictions on military activities in foreign Exclusive Economic Zones (EEZs). UNCLOS improves the coastal nation's authority for regulating its EEZ, but guidelines are needed to prevent ambiguity.

Thao, Nguyen Hong. "Maritime Delimitation and Fishery Cooperation in the Tonkin Gulf." 36 *Ocean Development & International Law* 25-44 (2005).

In June 2004 China and Vietnam ratified both a maritime boundary agreement for the Tonkin Gulf (Beibu Gulf) and a fisheries cooperation agreement for the Gulf. These agreements ended years of negotiation and debate regarding the rights of the respective states to the ocean areas and resources in the Gulf (*abstract courtesy of Ocean Development & International Law*).

Valencia, Mark J. and Kazumine Akimoto. "Report of the Tokyo Meeting and Progress to Date." 29 *Marine Policy* 101-106 (2005).

Valencia and Akimoto discuss the relationship between maritime powers and coastal nations with regard to the use of Exclusive Economic Zones (EEZs). There is agreement that the coastal States' rights should not be impeded by EEZs, but there is disagreement about application of the pertinent sections of the 1982 United Nations Convention on the Law of the Sea (UNCLOS), which is used to solve EEZ issues. Valencia and Akimoto propose more discussions between maritime powers and coastal States to create voluntary guidelines and an implementation plan for dealing with disagreements between the two groups.



XIII. LAW OF THE SEA

Djalal, Hasjim. "Draft Guidelines for Military and Intelligence Gathering Activities in the EEZ and their Means and Manner of Implementation and Enforcement." 29 *Marine Policy* 175-183 (2005).



There are a wide range of views concerning the proposed guidelines for military and intelligence gathering activities in the Exclusive Economic Zone (EEZ). Maritime powers do not want any restrictions, while the coastal States want at least some regulation in this area. Both parties agree that there needs to be a mutual understanding concerning the rights of each party, and Djalal gives suggestions for guidelines and enforcement measures.

Dyke, Jon M. "The Disappearing Right to Navigational Freedom in the Exclusive Economic Zone." 29 *Marine Policy* 107-121 (2005).

The regulation of Exclusive Economic Zones (EEZs) by coastal nations has greatly impeded the freedom of navigation, with seafaring restrictions depending on the kind of ship and its cargo. Examples of those affected include fishing boats, oil tankers, transports laden with nuclear material, and military vessels. The equilibrium between the coastal countries' powers and the freedom of navigation is still evolving.

Ferrell, Jessica K. "Controlling Flags of Convenience: One Measure to Stop Overfishing of Collapsing Fish Stocks." 35 *Environmental Law* 323-390 (2005).

Ferrell suggests ways to enlist public and private support in the control of illegal, unregulated, and unreported (IUU) fishing in international waters. Nations only have the authority to pursue illegal fishing vessels in their own "exclusive economic zone" (EEZ), under the 1982 United Nations Convention on the Law of the Sea (UNCLOS). Flagged vessels can usually only be prosecuted by the flag state.

Kim, Duk-ki. "A Korean Perspective." 29 *Marine Policy* 157-161 (2005).

Kim discusses the dual jurisdiction of the Exclusive Economic Zone (EEZ) due to both the coastal nation's interest and the general-use interest for freedom of navigation and communication. South Korea views the EEZ as a "sui generis zone," which requires the country's consent for all military and intelligence activities that would occur within its waters. The 1982 United Nations Convention on the Law of the Sea (UNCLOS) allows for military activities, but Kim believes that these allowances may be reinterpreted in the future.

Nelson, Jason C. "The Contemporary Seabed Mining Regime: A Critical Analysis of the Mining Regulations Promulgated by the International Seabed Authority." 16 *Colorado Journal of International Law and Policy* 27-75 (2005).

Nelson reviews the International Seabed Authority (ISA) and the history of the current seabed mining code, which gives effect to the seabed mining directives found in the United Nations Convention on the Law of the Sea (UNCLOS). The author argues that the seabed code is not set up to adequately control the environmental hazards of such mining.

Skaridov, Alexander S. "Naval Activity in the Foreign EEZ - the Role of Terminology in Law Regime." 29 *Marine Policy* 153-155 (2005).

Skaridov analyzes terminology in the Law of the Sea by looking at generic characteristics and specific differences of the terms. Skaridov applies this analysis to military hydrographic surveys, finding that they do not fall under the category of a threat to use force.



Xiaofeng, Ren and Cheng Xizhong. "A Chinese Perspective." 29 *Marine Policy* 139-146 (2005).

China argues that Exclusive Economic Zone (EEZ) restrictions requiring navigation and overflight to be peaceful and not a threat against a coastal nation are valid because of the coastal State's rights. Additionally, China argues that marine scientific research (MSR) requires the coastal State's permission.



XIV.

MARINE MAMMALS

Bakalar, Elizabeth M. "Subsistence Whaling in the Native Village of Barrow: Bringing Autonomy to Native Alaskans Outside the International Whaling Commission." 30 *Brooklyn Journal of International Law* 601-639 (2005).

Bakalar describes the history of Native Alaskan whaling and the beginnings of the International Whaling Commission (IWC). Bakalar argues that the IWC is not capable of protecting the needs of Alaska's Eskimos. This role, she suggests, should be given to the Alaska Eskimo Whaling Commission (AEWC).

Gillespie, Alexander. "The Dugong Action Plan for the South Pacific: An Evaluation Based on the Need for International and Regional Conservation of Sirenians." 36 *Ocean Development & International Law* 135-158 (2005).

The purpose of this article is to set out the essential requirements for a successful regional agreement for Sirenians in the South Pacific. To achieve this, the current Dugong Action Plan, which is being formed under the auspice of the South Pacific Regional Environmental Program, will be juxtaposed against the "best practice" in this area, as evinced by current development in international environmental law and policy relating to Sirenians (*abstract courtesy of Ocean Development & International Law*).

Inkelas, Daniel. "Security, Sound, and Cetaceans: Legal Challenges to Low Frequency Active Sonar under U.S. and International Environmental Law." 37 *George Washington International Law Review* 207-249 (2005).

Inkelas reviews the legislative and judicial changes of 2003 and 2004 regarding low frequency active sonar (LFAS). The author argues that no law, including U.S. environmental law, international law, or the precautionary principle, bars the use of LFAS or the attendant deaths of marine mammals.

National Research Council. Ocean Studies Board. *Marine Mammal Populations and Ocean Noise: Determining When Noise Causes Biologically Significant Effects* (2005).

Ocean noise has been blamed for a recent chain of marine mammal strandings. This NRC report provides a conceptual model that aids in the identification of biologically significant marine mammal behaviors, so that possible changes due to noise can be noted. It was written to help scientists and policymakers better interpret sections of the federal Marine Mammal Protection Act (*Report available from the Ocean Studies Board at www.nap.edu/books/0309094496.html/*).

Ward-Geiger, Leslie I., et. al. "Characterization of Ship Traffic in Right Whale Critical Habitat." 33 *Coastal Management* 263-278 (2005).



To lessen the number of ship strikes with the endangered North Atlantic right whale, the National Marine Fisheries Service and the U.S. Coast Guard created the Mandatory Ship Reporting System. Since 1999, all commercial ships weighing 300 gross tons or more have been required to make a report when sailing into the whale's critical habitat. The information gathered through the monitoring of ship traffic will be useful in the development of ways to minimize injuries to right whales.

**XV.****MARINE PROTECTED AREAS**

Dahl-Tacconi, Nancy. "Investigating Information Requirements for Evaluating Effectiveness of Marine Protected Areas—Indonesian Case Studies." 33 *Coastal Management* 225-246 (2005).

Dahl-Tacconi presents the results of a study into the type of information required by managers and stakeholders when evaluating the effectiveness of marine protected areas (MPAs). The study, conducted in Indonesia, shows that informational needs differ by location. Stated management objectives did not aid in the improvement of MPA management.

Enríquez-Andrade, Roberto, et. al. "An Analysis of Critical Areas for Biodiversity Conservation in the Gulf of California Region." 48 *Ocean & Coastal Management* 31-50 (2005).

Enríquez-Andrade, et. al. review a study of vital biodiversity conservation areas and the level of anthropogenic pressure exerted on natural resources in the Gulf of California. Unfortunately, the study proved that high levels of anthropogenic pressure were focused on areas of biological conservation.

**XVI.****MARITIME LAW**

Lee III, Joseph E. and Stuart P. Sperling. "The Eleventh Amendment, the Flotilla Doctrine, and Other Flanking Maneuvers: Recent Efforts by Claimants to Avoid the Application of the Limitation of Shipowners' Liability Act." 29 *Tulane Maritime Law Journal* 1-27 (2004).

Lee examines how some courts have eroded the Limitation of Shipowners' Liability Act. *Magnolia Marine Transport Co. v. Oklahoma* and *In re Norfolk Dredging Co.* are referred to as examples of creative plaintiffs' attorneys using the Eleventh Amendment and the Flotilla Doctrine to get around the Act.

Li, Kevin X., et. al. "Maritime Policy in China after WTO: Impacts and Implications for Foreign Investment." 36 *Journal of Maritime Law & Commerce* 77-139 (2005).

Li, et. al. examine China's pre-WTO shipping laws, documenting changes in the laws to meet the WTO's standards on maritime transport services. The effect on operators of foreign shipping vessels is reviewed.

Pfander, James E. "Jones Act Claims Against the States after *Alden v. Maine*: The Surprisingly Strong Case for a Compulsory State Court Forum." 36 *Journal of Maritime Law & Commerce* 1-20 (2005).



Pfander reviews state court decisions occurring after *Alden v. Maine*, where the U.S. Supreme Court said state sovereign immunity prevented many citizen lawsuits to enforce federal statutory rights. State sovereign immunity is explained in the context of the Jones Act and Federal Employers Liability Act (FELA). Pfander argues that *Alden* ensures that lawsuits that assert federal maritime personal injury claims must be allowed into state court.

Sage, Bénédicte. "Identification of 'High Risk Vessels' in Coastal Waters." 29 *Marine Policy* 349-355 (2005).

Sage argues that if coastal European states could identify 'High Risk Vessels' (HRVs) in waters near their shores, such HRVs could be monitored and state interests better protected. Such monitoring is limited, however, by the UN Convention on the Law of the Sea and other international laws. Sage offers potential 'HRV' criteria that could establish a legal basis for HRV monitoring.

Song, Yann-Huei. "Cross-strait Interactions on the South China Sea Issues: A Need for CBMs." 29 *Marine Policy* 265-280 (2005).

Song discusses Taiwan's role in the recent developments in the South China Sea (SCS) which involve anticipated actions by China and ASEAN member states under the Declaration on the Conduct of Parties in the SCS. Song is concerned that Taiwan will be denied its legitimate rights and interests in the SCS. Chinese actions that could build trust between China and Taiwan, and help the tiny island nation participate in the SCS activities, are discussed.

Su, Steven Wei. "The Territorial Dispute over the Tiaoyu/Senkaku Islands: An Update." 36 *Ocean Development & International Law* 45-61 (2005).

This article discusses one of the most difficult disputes in the world; the territorial dispute over the Tiaoyu Islands. The situation in the area has drastically deteriorated since the early 1990s, when the disputants began intensifying their claims. The issues involved in the dispute will be analyzed by reference to current law, as interpreted and applied by international judicial authorities (*abstract courtesy of Ocean Development & International Law*).

Tasikas, Vasilios. "Unmanned Aerial Vehicles and the Doctrine of Hot Pursuit: A New Era of Coast Guard Maritime Law Enforcement Operations." 29 *Tulane Maritime Law Journal* 59-80 (2004).

Tasikas examines the international legal ramifications of the Coast Guard using Unmanned Aerial Vehicles (UAVs) to protect U.S. territorial waters and fisheries. Tasikas argues that while the use of UAVs for pursuing illegal incursions by foreign-vessels might not be allowed under the current international legal framework, UAVs are necessary to patrol the 200 mile Exclusive Economic Zone.

Van Dyke, Jon M. "An Analysis of the Aegean Disputes under International Law." 36 *Ocean Development & International Law* 63-117 (2005).

Greece and Turkey have been unable to resolve interrelated disputes in the shelf, the demilitarization of certain islands, and the passage rights of ships and planes. This article examines the historical background of these disputes and offers recommendations for possible solutions (*abstract courtesy of Ocean Development & International Law*).

**XVII. MARITIME SECURITY**

Barrios, Erik. "Casting a Wider Net: Addressing the Maritime Piracy Problem in Southeast Asia." 28 *Boston College International and Comparative Law Review* 149-163 (2005).

Barrios examines international law in the context of penalties for piracy in Southeast Asia. After discussing the United Nations Convention on the Law of the Sea (UNCLOS), the Convention on the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (also known as the "Rome Convention"), Barrios suggests that international piracy laws be improved.

Becker, Michael A. "The Shifting Public Order of the Oceans: Freedom of Navigation and the Interdiction of Ships at Sea." 46 *Harvard International Law Journal* 131-230 (2005).

Becker argues that the lack of global ocean regulation and controls could serve as a pathway for the proliferation of weapons of mass destruction. The author reviews the U.S. Proliferation Security Initiative ("PSI") of 2003, and questions whether the long-standing view towards freedom from interference on the high seas needs to be curtailed in favor of increased world security.

Estrin, Lauren. "The Preservation of Privacy Interests at Sea: The Need For Meaningful Scope Limits on Custom Official and the Coast Guard's Sweeping Authority to Search Vessels." 29 *Tulane Maritime Law Journal* 105-124 (2004).

Estrin argues that Congress and the courts have allowed the Coast Guard, under 14 U.S.C. § 89(a), and custom officials, under 19 U.S.C. §1581, to have almost unfettered power to pursue issues of national security since September 11, 2001. Estrin believes this power is eroding Fourth Amendment rights of unreasonable search and seizure and past Supreme Court precedent.

King, John. "The Security of Merchant Shipping." 29 *Marine Policy* 235-245 (2005).

King focuses on the measures taken to prevent terrorist action and strengthen security since the World Trade Center was destroyed. The security of transportation is a large concern, and King addresses the preventative measures that have been taken. King also discusses the security challenges that are associated with merchant shipping.

Reddish, Jason. "Forgotten Fears Present Imminent Threats to the Maritime Shipping and Recreation Industries: The Risk Posed By the Availability of Sea Mines." 29 *Tulane Maritime Law Journal* 125-138 (2004).

Reddish looks at the history of sea mine warfare and the failure of the international community to deal with sea mines left over from previous wars. Reddish concludes that the lack of control over sea mines leaves the shipping and cruise industry vulnerable to attacks from terrorist groups like Al Qaeda.

**XVIII. OCEAN OBSERVING SYSTEMS**

Butler, Declan. "Global Bomb-Test Monitor Could Give Tsunami Warnings." 434 *Nature* 261 (2005).

Butler discusses the use of the International Monitoring System (IMS), used to detect unauthorized nuclear bomb tests, as a tool for the detection of tsunamis. The IMS has 130



monitoring stations in operation and a total of 321 stations planned for around the globe. To measure earthquakes, IMS uses seismic, hydroacoustic (underwater sound) and infrasound (sound below that which people can hear) data which can instantly be sent around the globe by satellite.

Coleman, James M. "Science and Education: Building Blocks for Improved Ocean Management." 38 *Marine Technology Society Journal* 30-34 (2004/2005).

Coleman discusses the recommendation of the U.S. Commission on Ocean Policy to improve ocean science and education, and calls for ocean and coastal research on a regional and global scale; ocean exploration for study of undiscovered species and archaeological sites; more accurate mapping and charting of oceans with coordination of existing federal mapping programs to increase efficiency; an Integrated Ocean Observing System; increased monitoring of oceans and coastal areas; programs to aid in the creation and dissemination of information; and education of the public regarding pollution and other ocean and coastal issues. Coleman addresses the need for increased federal research funding, infrastructure maintenance, data translation, and public education.



XIX.

OCEAN POLICY AND GOVERNANCE

Foster, Elizabeth, et. al. "Implementing Integrated Oceans Management: Australia's South East Regional Marine Plan (SERMP) and Canada's Eastern Scotian Shelf Integrated Management (ESSIM) Initiative." 29 *Marine Policy* 391-405 (2005).

Integrated oceans management (IOM) is a useful tool in making the global use of ocean space and marine resources sustainable. The IOM implementation strategies of Australia and Canada are compared and contrasted.

Gilchrest, Wayne T. "U.S. Ocean Policy: Evolution versus Revolution." 38 *Marine Technology Society Journal* 14-16 (2004/2005).

Gilchrest compares the evolution of life on earth, detailed in Charles Darwin's *Origin of Species*, with the evolution of ocean policy in the United States. The establishment of a National Ocean Council, reauthorization of the Coastal Zone Management Act, reauthorization of the Magnuson-Stevens Fishery Management and Conservation Act, increased ocean research, and creation of a standing committee in the House to work strictly in the area of ocean policy are encouraged in light of the U.S. Commission on Ocean Policy's report, *An Ocean Blueprint for the 21st Century*.

Hoagland, Porter and Andrew R. Solow. "Regional Ocean Governance: A Critique of Two Recent Proposals." 38 *Marine Technology Society Journal* 61-67 (2004/2005).

The recommendations of the U.S. Commission on Ocean Policy and the Pew Oceans Commission are discussed, which advocate a regional approach to ocean management. Hoagland and Solow are critical of the regional approach recommendations of these commissions. In order for regional management to be effective, the scope of the regional institutions must be tailored to the scale of the specific problems it wishes to address; tangible incentives for participation in management decisions must be provided to political entities comprising the membership of the regional institutions; and it must be recognized that federal resources in the Exclusive Economic Zone belong to the citizens of the U.S. as a whole and not merely to the region in which they are found.



Hollings, Ernest F. "High Time for the Oceans." 38 *Marine Technology Society Journal* 10-13 (2004/2005).

Hollings recounts his 1969 Congressional work to implement recommendations of the Stratton Commission, including the creation of NOAA. Hollings then discusses the recommendations of the Final Report of the U.S. Commission on Ocean Policy including proposals to strengthen NOAA, to make NOAA an independent agency, and to increase NOAA's funding. Congress, Governors and the Administration are encouraged to work together to save the oceans and to implement the recommendations set forth in the recent report submitted by the U.S. Commission on Ocean Policy.

Knauss, John A. "The Stratton Commission: Its Origins, How it Operated, Its Legacy." 38 *Marine Technology Society Journal* 58-60 (2004/2005).

Knauss discusses the history of the 1969 report of the Commission on Marine Science, Engineering and Resources, known as the Stratton Report. The Stratton Report called for an independent National Oceanic and Atmospheric Administration and inspired legislation such as the Marine Resources and Engineering Development Act, the Coastal Zone Management Act and the development of the University National Laboratory System of the National Science Foundation.

Lautenbacher, Jr., Conrad C. "Shaping Ocean Policy for the Next Generation." 38 *Marine Technology Society Journal* 17-18 (2004/2005).

Lautenbacher discusses the recent release of the President's Commission on Ocean Policy report, the first of its kind in thirty-five years, as well as the NOAA Organic Act. Lautenbacher details the successes of improved fisheries as a result of NOAA's transition to an ecosystem based approach to fisheries management, and encourages the development of an Integrated Ocean Observing System.

Ruckelshaus, William D. "Creating a New National Ocean Policy Framework." 38 *Marine Technology Society Journal* 24-29 (2004/2005).

Ruckelshaus discusses the recommendation of the U.S. Commission on Ocean Policy to create a new National Ocean Policy Framework which will promote an ecosystem-based management approach to ocean and coastal management and coordinate state, local and federal management programs. The creation of a National Ocean Council is advocated, as well as a coordinated regional approach to ocean and coastal management; a more comprehensive offshore management regime which will provide for participation of federal, regional and state agencies; a strengthened and better coordinated federal agency structure; improved watershed management; and improved international ocean management.

Sandifer, Paul. "Managing Ocean and Coastal Areas, Ecosystems, and Resources." 38 *Marine Technology Society Journal* 35-41 (2004/2005).

The recommendations of the U.S. Commission on Ocean Policy are discussed, emphasizing the need for an ecosystem-based management approach. Sandifer calls for the expansion and increased funding of coastal habitat conservation and restoration programs; improvement in federal natural hazards management; coordination of federal agencies and increased funding in addressing coastal water pollution; enactment of the



Coral Protection and Management Act; establishment of an oceans and human health initiative; and consideration of renewable energy sources as part of the offshore management regime.

Schwartz, Daniel S. "The U.S. Commission on Ocean Policy and Its Implications for Marine & Ocean Industries." 38 *Marine Technology Society Journal* 56-57 (2004/2005).

The Marine Technology Society supports the U.S. Commission on Ocean Policy's recommendations through its mission to disseminate information regarding marine science, promote marine education, develop tools and procedures for ocean exploration, and create services that promote understanding of marine science. Schwartz calls for promotion of efforts to raise awareness of the economic implications of ocean policy; enhanced ocean infrastructure development; establishment of a long duration, unmanned Integrated Ocean Observing System; and ocean education that encourages stewardship of ocean resources.

Steel, Brent S., et. al. "Public Ocean Literacy in the United States." 48 *Ocean & Coastal Management* 97-114 (2005).

Steel, et. al. conducted a study of U.S. citizens to calculate the current level of public knowledge regarding the oceans. The study demonstrated the usefulness of newspapers and the internet in improving public knowledge on ocean topics.

Steel, Brent, et. al. "Correlates and Consequences of Public Knowledge Concerning Ocean Fisheries Management." 33 *Coastal Management* 37-51 (2005).

Brent, et. al. conducted a study to determine the scope and depth of knowledge that everyday citizens and non-expert stakeholders have regarding ocean fisheries management policy. Over 3,000 surveys were mailed out to citizens of the Pacific Northwest to determine their understanding of coastal and ocean policy, the sources of their knowledge, and relationships between that knowledge and support for Pacific fisheries restoration. The study found that public knowledge is important in securing support for ocean and coastal management.

Walker, Dan. "Oceans and Watersheds: Common Problems, Common Solutions." 38 *Marine Technology Society Journal* 42-55 (2004/2005).

The U.S. Commission on Ocean Policy report, *An Ocean Blueprint for the 21st Century*, emphasizes the "links among the land, air, oceans, and human activities." Walker calls for increased research to aid in policy decisions and details current information regarding the Gulf of Mexico and the Mississippi River Basin underscoring the nutrient pollution problem and the need for water resources development. Data collection systems like the Integrated Ocean Observing System require further development, and decision makers need better access to watershed information.

Watkins, James D. "Our Oceans Need You." 38 *Marine Technology Society Journal* 8-9 (2004/2005).

Watkins emphasizes the importance of the oceans and discusses their declining condition. Watkins urges citizens to get involved in the fight to save the oceans, referring to the three major recommendations of the U.S. Commission on Ocean Policy: cre-



ation of a National Ocean Policy Framework, increased scientific study that is credible and accessible, and enhanced ocean education encouraging better stewardship of the oceans. The Administration and Congress are encouraged to implement these recommendations.

Watkins, James D. and Morgan Gopnik. "An Ocean Blueprint for the 21st Century: The Work of the U.S. Commission on Ocean Policy." 38 *Marine Technology Society Journal* 19-23 (2004/2005).

Watkins and Gopnik discuss the importance of the oceans and detail the creation of the U.S. Commission on Ocean Policy as well as the formation of the Commission's recent recommendations. The Commission's policy vision for the future and the themes of a coordinated national ocean policy framework, scientific study, and ocean-related education found in the Commission's recommendations are explained. Watkins and Gopnik propose the creation of an Ocean Policy Trust Fund supported with revenues generated by activities permitted in federal waters, which would supplement current ocean policy and research funding.

West, Dick. "Ocean Literacy is Key to Preserving Our Oceans and Costs." 38 *Marine Technology Society Journal* 68-69 (2004/2005).

West discusses the recommendations for increased ocean education of the U.S. Commission on Ocean Policy report, *An Ocean Blueprint for the 21st Century*, and the Pew Ocean Commission report, *America's Living Oceans: Charting a Course for Sea Change*. Investment in higher education science and technology classes; the development of an ocean workforce through training; and the establishment of programs for national public outreach engaged in education through museums, aquaria and other informal education are but a few of the ways to increase the public knowledge of the oceans.



XX.

OFFSHORE INSTALLATIONS

Kaiser, Mark J. and Allan G. Pulsipher. "Rigs-to-Reef Programs in the Gulf of Mexico." 36 *Ocean Development & International Law* 119-134 (2005).

The Louisiana and Texas Artificial Reef Programs are the largest rigs-to-reef programs in the world. The purpose of this article is to describe the Louisiana and Texas Artificial Reef Programs, to compare their regulatory structures, and to discuss the nature of the cost savings associated with reef donation and the frequency of donation (*abstract courtesy of Ocean Development & International Law*).



XXI.

OFFSHORE WIND FARMS

Heerde, Matthew C. "Don't Need a Weatherman To Know Which Way the Wind Blows: What Does the Cape Wind Decision Foretell For the Offshore Wind Energy Industry?" 17 *Georgetown International Environmental Law Review* 253-271 (2005).

Heerde examines the *Alliance to Protect Nantucket Sound, Inc. v. United States Dep't of the Army* case and federal and state regulations to predict the future of offshore wind energy in the U.S.



Kempton, Willett, et. al. "The Offshore Wind Power Debate: Views from Cape Cod." 33 *Coastal Management* 119-149 (2005).

The proposed wind power project off Massachusetts' coast is discussed. Interviews with Cape Cod residents were conducted to gauge which issues were important to locals. Based on these interviews, Kempton, et. al. identify four relevant concerns that are not currently being discussed.

Thompson, Robert. "Reporting Offshore Wind Power: Are Newspapers Facilitating Informed Debate?" 33 *Coastal Management* 247-262 (2005).

Thompson explains the importance of having a newspaper forum for public discussion on offshore wind power and local wind generation proposals. After reviewing 110 newspaper articles on wind power in three New England newspapers, Thompson concluded that environmental, social, and regulatory issues were inadequately addressed.



XXII. POLLUTION

Casado, Carmen. "Vessels on the High Seas: Using a Model Flag State Compliance Agreement to Control Marine Pollution." 35 *California Western International Law Journal* 203-236 (2005).

Casado discusses the 2002 *Prestige* oil spill and the need for change in the international laws that regulate ocean-going vessels. In response to the lawless nature of high seas shipping, nations have adopted limits on vessel waterway travel, created port authorities, targeted single hull tankers for replacement, and created voluntary control programs for ship owners and their country of origin. Casado also examines the U.N. Food and Agriculture Organization's Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, and proposes a model Compliance Agreement for shipping vessels and the formation of a Global Registry.

Duchesne, Matthew. "Discharging the Clean Water Act's NPDES Requirements: Why the 'Unitary Waters' Theory does not Hold Water." 23 *Virginia Environmental Law Journal* 461-477 (2005).

Duchesne explains the Clean Water Act (CWA) with regard to its provision requiring a permit for the discharge of a pollutant from a point source into the navigable waters of the United States. The author reviews the *South Florida Water Management District v. Miccosukee Tribe of Indian* case, the Central and South Florida Flood Control Project, and the problems of the "unitary waters" approach under the CWA.

Garcia, Iciar Patricia. "'Nunca Mais!' How Current European Environmental Liability and Compensation Regimes Are Addressing the *Prestige* Oil Spill of 2002." 25 *University of Pennsylvania Journal of International Economic Law* 1395-1437 (2004).

Garcia examines the second largest oil spill in European history and the effects it had on the European Union's maritime regulations. Garcia specifically looks at the liability and compensation regimes arising out of the environmental damage caused, and encourages political systems to move beyond assigning monetary awards based purely on an economic basis.



Hudson, Darren, et. al. "Public Perception of Agricultural Pollution and Gulf of Mexico Hypoxia." 33 *Coastal Management* 25-36 (2005).

Hudson, et. al. discuss the rising problem of hypoxia in the Gulf of Mexico from non-point-source pollution. Agriculture is believed to be the main source of non-point-source pollution, so limiting agricultural pollution is important. The study reveals that public perception is low, and there is some willingness to pay to help alleviate the problem.

Klass, Alexander B. "From Reservoirs to Remediation: The Impact of CERCLA on Common Law Strict Liability Environmental Claims." 39 *Wake Forest Law Review* 903-970 (2004).

Klass examines the impact on claims of strict liability for environmental contamination under the federal Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") and similar state laws.

Knutsen, Brian. "Asserting Clean Water Jurisdiction over Isolated Waters: What Happens after the SWANCC Decision." 10 *Albany Law Environmental Outlook Journal* 155-196 (2005).

Knutsen explores the SWANCC decision and its progeny. After discussing the Army Corps of Engineers' regulation of isolated intrastate waters, Knutsen argues for clear Clean Water Act jurisdictional boundaries.

Nesterowicz, Malgorzata Anna. "European Union Legal Measures in Response to the Oil Pollution of the Sea." 29 *Tulane Maritime Law Journal* 29-44 (2004).

Nesterowicz examines the European Union's (EU) unilateral measures that go beyond international treaties to protect its ports from oil pollution. MARPOL and the EU's involvement in the International Maritime Organization are discussed as backdrops to the EU's decisions.



XXIII. SCIENTIFIC RESEARCH

Bateman, Sam. "Hydrographic Surveying in the EEZ: Differences and Overlaps with Marine Scientific Research." 29 *Marine Policy* 163-174 (2005).

Bateman compares and contrasts hydrographic surveying and marine scientific research in the Exclusive Economic Zone (EEZ). It is appropriate for hydrographic surveying, including military surveys, to be under a coastal nation's jurisdiction, but military surveys in the EEZ should not be. Bateman proposes guidelines associated with hydrographic surveying in the EEZ.

Chen, Shui-sen, et. al. "Remote Sensing and GIS-based Integrated Analysis of Coastal Changes and their Environmental Impacts in Lingding Bay, Pearl River Estuary, South China." 48 *Ocean & Coastal Management* 65-83 (2005).

Chen, et. al. argue that remote sensing is essential to monitoring coastline erosion, the growth of cities, modifications in land-use, and the movement of shoals and deep-water channels. These occurrences have greatly impacted sustainable development in Lingding Bay, the largest estuary of China's Pearl River. Chen, et. al. also discusses flood control, prevention, and coastal planning.



Curry, Ruth and Cecilie Mauritzen. "Dilution of the Northern North Atlantic Ocean in Recent Decades." 308 *Science* 1772-1774 (2005).

The North Atlantic Ocean has experienced a drastic reduction in salinity since the 1960's, showing that copious sums of fresh water have been introduced. Curry and Mauritzen estimate that 14,000-24,000 cubic kilometers of freshwater entered the North Atlantic between 1965 and 1995. Freshwater accumulation in this part of the ocean will likely take a century to reach critical levels.

Daniel, Edsel D., and Mark D. Abkowitz. "Predicting Storm-Induced Beach Erosion in Caribbean Small Islands." 33 *Coastal Management* 53-69 (2005).

Daniel and Abkowitz discuss their research efforts into developing a prototype beach analysis and management system (BAMS) for Caribbean Small Islands (CSIs) to predict beach erosion from storms. The BAMS utilizes existing coastal data, geographic information systems (GIS), and other technologies to understand beach erosion and manage its impacts. Using the Southern Peninsula of St. Kitts as a case study, the second phase of the research is discussed including the prediction of episodic beach erosion and the possible damage which could occur.

Masalu, Desiderius C.P. "Evolution of Information and Communication Technology in Tanzania and its Impact on Ocean Data and Information Management." 48 *Ocean & Coastal Management* 85-95 (2005).

Tanzania banned the importation of computers in 1974, citing problems it experienced while trying to modernize its government. As a result, computer literacy and the creation of information technology, including ocean data and information management, has suffered. However, technological progress is being made by way of the Ocean Data and Information Network for Africa (ODINAFRICA) project.

National Research Council. Ocean Studies Board. Marine Mammal Populations and Ocean Noise: Determining When Noise Causes Biologically Significant Effects (2005).

Ocean noise has been blamed for a recent chain of marine mammal strandings. This NRC report provides a conceptual model that aids in the identification of biologically significant marine mammal behaviors, so that possible changes due to noise can be noted. It was written to help scientists and policymakers better interpret sections of the federal Marine Mammal Protection Act (*Report available from the Ocean Studies Board at www.nap.edu/books/0309094496.html/*).

National Research Council. Ocean Studies Board and the Polar Research Board. Final Comments on the Science Plan for the North Pacific Research Board Committee on a Science Plan for the North Pacific Research Board (2005).

This NRC publication reviews the North Pacific Research Board's (NPRB) draft science plan. The NPRB is charged with suggesting fisheries or marine ecosystem research opportunities to the Secretary of Commerce for the waters of the North Pacific Ocean, Bering Sea, Arctic Ocean, and others. The science plan will help NPRB accomplish its research goals (*Report available from the Ocean Studies Board at www.nap.edu/books/0309096022.html/*).



Schmittner, Andreas. "Decline of the Marine Ecosystem Caused by a Reduction in the Atlantic Overturning Circulation." 434 *Nature* 628-633 (2005).

Schmittner uses ensemble simulations with a coupled climate-ecosystem model of intermediate complexity to investigate the possible consequences of reorganizations of the Atlantic meridional overturning circulation, which caused abrupt climate changes during the last ice age. Schmittner found that there is a fifty percent decrease of the North Atlantic plankton stock and a twenty percent decrease in globally integrated exports due to reduced upwelling of nutrient-rich deep water and gradual depletion of upper ocean nutrient concentrations.

Syvitski, James P. M., et. al. "Impact of Humans on the Flux of Terrestrial Sediment to the Global Coastal Ocean." 308 *Science* 376-380 (2005).

Syvitski, et. al. estimate the seasonal flux of sediment in various rivers, comparing contemporary and pre-human conditions. Globally, people have raised the amount of sediment transport by rivers through soil erosion, yet reduced the amount of sediment reaching the coasts through reservoir retention.

Wang, Yeqiao, et. al. "Involving Geospatial Information in the Analysis of Land-Cover Change along the Tanzania Coast." 33 *Coastal Management* 87-99 (2005).

Wang, et. al. reveal the first study of the change on land-use and land-cover in Tanzania's coastal zone. The images used in the study were taken from the 1990 Landsat Thematic Mapper (TM) sensor and 2000 Landsat-7 Enhanced Thematic Mapper Plus (ETM+) sensor. Geographic information system (GIS) technologies are used to determine the change in land-use and land-cover. Urban land-use increased, which lead to a decrease in dense woodland and severe deterioration in Mangrove forests. The research shows how the use of technology can assist coastal research managers in planning and development.



XXIV. WATER RESOURCES

Kuo, Albert Y., et. al. "A Tidal Prism Water Quality Model for Small Coastal Basins." 33 *Coastal Management* 101-117 (2005).

Kuo, et. al. discuss the development of a tidal prism water quality model (TPWQM), which provides a vehicle for water quality management of small coastal basins by governmental agencies. The model uses tidal flushing to simulate physical transport, and offers an advanced demonstration of water column and benthic sediment eutrophication processes. The TPWQM was calibrated and tested in Lynnhaven Bay, Virginia, and proved to be quite accurate.

National Research Council. Water Science and Technology Board and the Board on Environmental Studies and Toxicology. Re-Engineering Water Storage in the Everglades: Risks and Opportunities (2005).

This NRC publication represents the seventh and final report of the Committee on Restoration of the Greater Everglades Ecosystem. Human developments have severely damaged the Everglades. The report discusses the Everglades Restoration Plan of 1999,



storage options, hydrologic and ecological data on water storage components, and the timing of land acquisitions (*Report available from the Water Science and Technology Board at www.nap.edu/books/0309095298.html/*).

National Research Council. Water Science and Technology Board. The Science of Instream Flows: A Review of the Texas Instream Flow Program (2005).

This NRC report attempts to aid cities, counties, and states manage their river water levels so that the water needs of people and the river ecosystem can be met simultaneously. Texas' instream flow program, which is discussed in the report, can serve as a model for other areas (*Report available from the Water Science and Technology Board at <http://www.nap.edu/books/0309095662.html/>*).

Sherk, George William. "Transboundary Water Allocation in the Twenty-first Century: Colloquium Article: The Management of Interstate Water Conflicts in the Twenty-first Century: Is it Time to Call Uncle?" 12 *New York University Environmental Law Journal* 764-827 (2005).

Sherk argues that despite a repeated order from the U.S. Supreme Court, states cannot solve interstate water conflicts on their own. The Apalachicola-Chattahoochee-Flint River Basin Compact is cited as an example. Sherk argues that Congress must pass new legislation to aid states in the distribution and administration of interstate waters.